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assign to each combination of channel input and input/bin of said transmitter substantially orthogonalizing procedure; and

a substantially orthogonal procedure processor system that applies, independently for each said channe, input, said transmitter substantially orthogonalizing procedure to said spatially processed symbols assigned to each said channel input.

Apparatus for processing a sequence of 227. (NEW) symbols received via a plurality of outputs of a channel, said apparatus comprising:

a substantially orthogonalizing procedure processor system that applies a receiver substantially orthogonalizing procedure to said sequence of symbols, said procedure being applied independently for each of said plurality of channel outputs, each output symbol of said substantially orthogonalizing procedure processor system corresponding to a particular output bin and a particular one of said channel outputs; and

a spatial processor that, for each output bin, spatially processes symbols corresponding to said output bin in accordance with a spatial direction assigned to said output bin to develop spatially processed symbols so that a spatial direction is/defined for each output bin, each output bin specifying one of a plurality of subchannels.--

## REMARKS

The present preliminary amendment is for the purpose of clarifying certain aspects of the present invention. certain claims have been cancelled for the purpose of reducing filing fees at the present time. The claims are believed to be in condition for allowance.

Applicants and the undersigned recognize the complexity of the present application. The Examiner is invited to contact

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the undersigned by telephone at any time to discuss the application.

Respectfully submitted,

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